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FEDERAL - STATE - PRIVATE COOPERATIVE

SNOW SURVEY and WATER SUPPLY FORECASTS

for

COLORADO, RIO GRANDE, PLATTE and ARKANSAS DRAINAGE BASINS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE, and

COLORADO AGRICULTURAL EXPERIMENT STATION, STATE ENGINEER of COLORADO and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, National Park Service, Bureau of Reclamation, State Engineers of Utah and Wyoming; and other Federal, State and private organizations.

MAR. 1, 1958

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS RIVER BASINS	ISSUED	COOPERATING WITH	LOCATION
	MONTHLY (FEB, -MAY),	COLO. EXP. STATION	FT. COLLINS, COLO.
COLUMBIA Includes Alaska	MONTHLY (JANMAY)		BOISE, IDAHO
UPPER MISSOURI	MONTHLY (FEB MAY)	Mont.Agr.Exp.Station	BOZEMAN, MONTANA
WEST-WIDE	SEMI-ANNUALLY (OCT. 1 AND APR.1)	COOPERATORS	PORTLAND, OREGON
STATES			
ARIZONA		SALT R. VALLEY WATER	PHOENIX, ARIZONA
NE VADA	MONTHLY (FEB APR.)	NEVADA STATE ENGINEER	RENO, NEVADA
ORE GON	MONTHLY (JANMAY)	ORE.AGR.EXP.STATION	PORTLAND, OREGON
UTAH	Monthly (JanMay)	UTAH STATE ENGINEERUTAH AGR.EXP.STATION	SALT LAKE CITY, UTAH
Washington	Monthly (FEBMAY)	WASH, STATE DEPT. OFCONSERVATION AND DEVELOPMENT	Spokane, Washington
WYOMING	MONTHLY (FEB JUNE)		CASPER, WYOMING
Coning of the	ha	secured from Head Water Supp	ly Forecasting Section

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section Soil Conservation Service 209 S.W. 5th Avenue, Portland 4, Oregon

PUBLISHED BY OTHER AGENCIES

OTHER SNOW SURVEY REPORTS	
BRITISH COLUMBIA	(FEBJUNE)
CALIFORNIAMonthly	(FEBMAY)

FEDERAL-STATE COOPERATIVE

SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

COLORADO RIVER, PLATTE RIVER ARKANSAS RIVER AND RIO GRANDE DRAINAGE BASINS

Issued

March 10, 1958

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United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado
and
State Engineer of Colorado
Denver, Colorado
and
State Engineer of New Mexico
Santa Fe, New Mexico

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S. E. Reynolds State Engineer State of New Mexico

General Series Paper No. 675 Colorado Agricultural Experiment Station

Snow Survey measurements in Wyoming, Utah, and Arizona are supplied by Snow Survey Supervisors, Soil Conservation Service, in those states.

WATER SUPPLY OUTLOOK COLORADO, RIO GRANDE, PLATTE AND ARKANSAS DRAINAGE BASINS March 1, 1958

WATER SUPPLY OUTLOOK AS OF MARCH 1 CONTINUES TO BE FAIR TO GOOD FOR ALL IRRIGATED AREAS OF COLORADO AND NEW MEXICO. SNOW PACK FOR THE SEASON TO DATE IS NEAR NORMAL IN BOTH STATES WITH A SUBSTANTIAL EXCESS IN SOUTHWESTERN COLORADO. IF SNOWFALL FOR THE REMAINDER OF THE SEASON IS NEAR AVERAGE, IRRIGATION WATER SUPPLY IN THE TWO STATES WILL BE GENERALLY ADEQUATE EXCEPT FOR LIMITED SHORTAGES IN LOCAL AREAS. WATER SUPPLY OUTLOOK IS ALMOST IDENTICAL TO THAT OF FEBRUARY 1, 1958.

SURFACE WATER SUPPLY OUTLOOK FOR ARIZONA IS POOR. FALL AND WINTER PRECIPITATION HAS BEEN DEFICIENT. STORAGE IN RESERVOIRS IS BELOW NORMAL.

As indicated by the present snow pack, runoff in mountain streams will likely be near normal during the 1958 irrigation season. The water supply outlook is improved materially due to the relatively large carryover reservoir storage from the heavy stream flow of 1957. Water in storage in most reservoirs is well above average and many contain several times the amount stored on this date a year ago. Soil moisture in irrigated areas is generally regarded as good compared to recent drouth years. Moisture under the snow in the mountains is better than average in southern and western Colorado and northern New Mexico, but is relatively dry on the watersheds of the northern tributaries of the South Platte and the Yampa and White Rivers.

Although present water supply outlook is favorable, much will depend on snow accumulation during the remainder of the snow season. As of March 1 about 60 percent of the snow season is completed.

ARIZONA. Surface water supply outlook for Arizona for 1958 is below average. There is practically no snow on the mountains in the state. Soil moisture conditions are relatively good in mountain areas. The eight reservoirs on the Gila, Salt, Verde and Agua Fria Rivers have in storage about 630,000 acre-feet which is 50 percent of last year, but only 70 percent of average and 15 percent of capacity.

UTAH. The water supply outlook for Colorado River tributaries in Utah declined during February. Snow cover now ranges from 70 to 100 percent of normal. Runoff estimates range from 75 to 90 percent of normal on the Duchesne and Price Rivers to 85-95 percent of normal on the San Rafael and Virgin Rivers in Southern Utah.

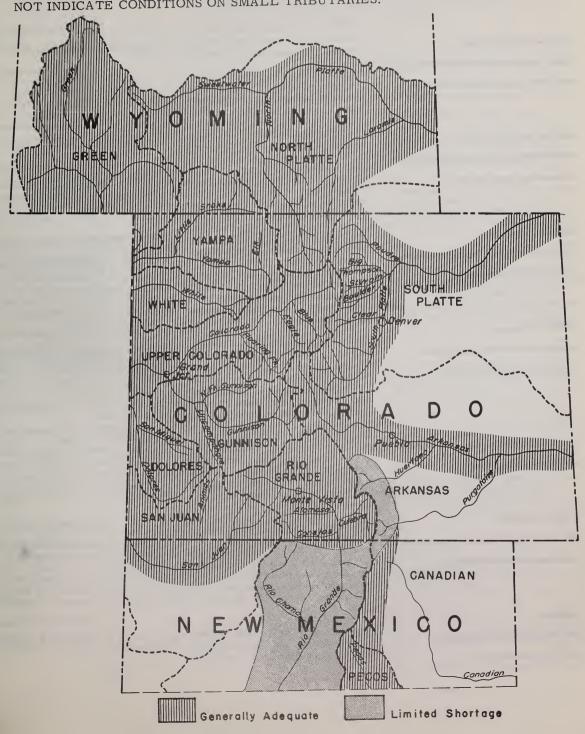
COOPERATIVE SNOW SURVEYS SUMMARY OF SNOW MEASUREMENTS

March 1, 1958

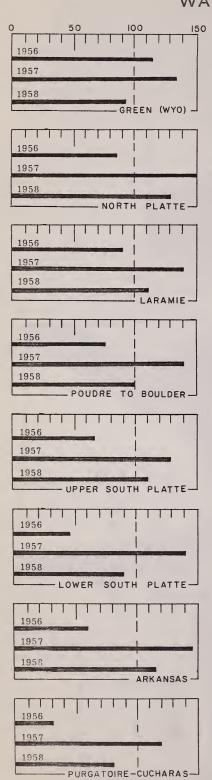
WATERSHEDS	No. of Courses	Years of	Water C		WATERSHEDS	No. of Courses	Years of	as pe	Content rcent of
	Averaged	Record	1957 Avg.			Averaged	Record	1957	7 Avg
ARKANSAS RIVER					PLATTE RIVER				
Arkansas River	6	15-22	7 5	106	Sweetwater				
					North Platte River	10	20-22	86	107
COLORADO RIVER					Laramie River	7	17-22	86	105
Colorado River*	18	11-22	86	100	South Platte River**	2	18-21	96	123
Roaring Fork	3	13-22	69	107	Poudre River	6	18-21	100	104
Plateau Creek	2	18-21	120	146	Big Thompson River	3	9-20	83	81
Yampa River	5	19-22	83	110	St. Vrain River	2	9-21	62	66
White River	2	19-22	88	121	Boulder Creek	1	21	68	72
Gunnison River	7	17-22	92	118	Clear Creek	2	16-21	88	96
Dolores River	4	9-19	95	112					
Green River (Wyo.)		0 10			RIO GRANDE				
San Juan River	5	17-21	63	87	Rio Grande (Colo.)	2	20-21	76	104
Animas River	6	7-19	99	129	Rio Grande (N. M.)	8	16-21	112	108
Gila River	7	11-20		55	Conejos River	4	9-21	58	72
Salt River	5	17-20		16	Chama River	4	17-21	81	88
Verde River	6	11-12		8	Pecos River	2	16-21	34	100
Little Colo. River	5	11-20		13	Canadian River	3	16-20	129	121
Williams River	2	12			Alamosa River	2	17-21	62	87
Lower Colo. River	4	11	56	45					
*Above Glenwood S	orings				**Above Denver				

WATER SUPPLY OUTLOOK

THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS DURING THE SPRING AND EARLY SUMMER MONTHS. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAMFLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.



WATER SUPPLY OUTLOOK



Average

THE BAR CHARTS ON THIS AND THE NEXT PAGE REPRESENT GRAPHICALLY THE MOST PROBABLE WATER SUPPLY OUTLOOK FOR 1958 AS COMPARED TO THE PAST YEARS 1956 AND 1957. STREAMFLOW AND OTHER FACTORS FOR 1957 ARE PARTIALLY ESTIMATED BECAUSE FULL DATA ON WATER SUPPLY CONDITIONS IS NOT YET AVAILABLE. ESTIMATES OF PAST CONDITIONS AND FORECASTS HAVE BEEN MADE BY THE AUTHORS OF THIS REPORT.

GREEN: The flow of the Green in Wyoming and Utah will be about average and adequate to meet local irrigation needs. Winter snow pack and fall precipitation have been slightly below normal.

NORTH PLATTE: Water supply on the North Platte should meet demands this year even if late season snowfall is deficient. Present indications are for about normal inflow to Seminoe and Pathfinder reservoirs. In addition there is now stored in Seminoe, Pathfinder, Alcova and Guernsey reservoirs about 1,500,000 acre-feet which is almost twice normal and over twice that of a year ago. Of this amount about 900,000 acre-feet is assigned to the older North Platte project.

LARAMIE: At the present time the snow and soil moisture measurements indicate that streamflow will be somewhat below normal on the Laramie River in 1958. With 75,000 acre-feet in storage in Wheatland Reservoir the water supply for the Wheatland area will be much better than for any recent year preceding last year.

POUDRE-BOULDER: Unless the rate of snow accumulation increases, the flow of the Poudre, Big Thompson and Saint Vrain Rivers and Boulder Creek will be less than normal in 1958. The bar chart considers the improvement in the storage in smaller irrigation reservoirs as compared to normal. In addition there is a total of about 200,000 ac re-feet in Horsetooth and Carter Lake reservoirs and over 300,000 acre-feet in Granby, most of which is available for a supplemental water supply. Soil moisture conditions in irrigated areas are good. Present streamflow is above normal.

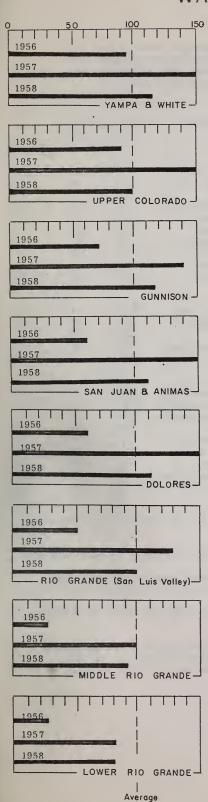
UPPER SOUTH PLATTE: Snow and soil moisture measurements indicate that the summer flow of the Upper South Platte River and Clear Creek will be near normal. Municipal reservoirs of the City of Denver were filled during snow melt last summer and are still at about 90 per cent of capacity. Storage in irrigation reservoirs is also relatively high. Soil moisture conditions are good. Shortages will occur only if late season snowfall is extremely deficient. An excess of water is not probable.

LOWER SOUTH PLATTE: The water supply outlook for the lower South Platte is relatively good. Streamflow in this area is more dependent on summer rainfall and irrigations demands during the runoff period. Major reservoirs have more than a normal amount of water in storage and can be expected to fill from a better than average winter streamflow. If average snowfall continues and spring and summer rainfall is normal this area will have a good water year.

ARKANSAS: Snow accumulation is about normal. The most probable summer streamflow of the main stream at points above Pueblo will be slightly more than normal. In contrast to the past several years reservoir storage is excellent. Last year storage throughout the valley was practically non-existent. John Martin reservoir now has in storage about 260,000 acre-feet. Usually the water content is near zero. Storage in reservoirs materially improves the outlook. In contrast to recent years, valley soil moisture is reported as good.

PURGATOIRE-CUCHARAS: Water supply outlook is fair to good for the Purgatoire, Cucharas and Huerfano Rivers. Much of the water supply depends on later precipitation.

WATER SUPPLY OUTLOOK



YAMPA-WHITE: Snowpack is near normal on the headwaters of the Yampa River and somewhat above normal on the White River headwaters. Water supply for next year will be adequate to meet demands. No excessive streamflows are anticipated. Soil moisture conditions in valley areas are fair to good.

UPPER COLORADO: Snowpack and soil moisture conditions are about normal on the upper Colorado River watershed. Most probable summer streamflow will be near average. Soil moisture conditions at lower elevations are fair to good which indicates a fair outlook for the limited irrigated areas along the small tributary streams.

GUNNISON: Water supply outlook for irrigated areas served by the Gunnison, North Fork and Uncompander Rivers is good for 1958. Snowpack is slightly below normal on the Continental Divide but well above normal on the Grand Mesa and on Red Mountain Pass. Taylor Park reservoir contains 83,000 acre-feet as compared to 60,000 for normal and 37,000 a year ago. Soil moisture conditions in valley areas are good and streamflow is above normal.

SAN JUAN-ANIMAS: Although the most probable streamflow for 1958 is expected to be a little less than normal water supplies will be adequate for most areas of the basin. Streams such as the Florida and LaPlata may have some late season shortage. Valley soils are wet. Mountain soils under the snow are at field capacity.

DOLORES: Summer flow of the Dolores is expected to be about average but much less than for a year ago. Storage in Groundhog reservoir is 15,000 acre-feet or nearly twice normal. Soils on the Montezuma project are wet. With average snowfall for the remainder of the winter season, water supplies should be adequate for 1958.

RIO GRANDE (San Luis Valley): Streamflow into San Luis Valley in the Rio Grande, Conejos and Alamosa Rivers will probable be slightly less than than average for 1958 and less than for 1957. The water supply outlook is average. Reservoir storage is between two and three times normal and perhaps ten times that of a year ago. Excessive streamflow in 1957 has been used to restore sub-soil moisture. Valley soil moisture conditions are described as good.

MIDDLE RIO GRANDE (New Mexico): Snowpack in northern New Mexico is about normal for this date. Soil moisture conditions in mountain areas are excellent due to heavy fall rains. At extremely high elevations a heavy snowpack has been reported. However, because of the lack of snow cover at lower elevations the outlook is for slightly less than normal flow for the Rio Grande in northern New Mexico. Water supply should be reasonably adequate along the tributaries. The Middle Rio Grande District may expect a fair water year even if total supplies are less than the 1938-52 average.

LOWER RIO GRANDE (New Mexico): Inflow to Elephant Butte will probably be about three quarters of normal this year but much will depend on later snowfall and summer storms. Storage in Elephant Butte and Caballo reservoirs is about 850,000 acre-feet or 75 per cent of normal. The water supply outlook is the best for many years, even if the total surface water supply is expected to be less than normal.

Water supply outlook for the Carlsbad Project on the Pecos River is good with 100,000 acre-feet of water stored in Alamogordo reservoir. Soil moisture conditions in the irrigated area are good.

FOR DETAILS ON WATER SUPPLY CONDITIONS ON THE COLORADO RIVER DRAINAGE IN UTAH AND ARIZONA, NOT LISTED OR DISCUSSED IN THIS REPORT, REFERENCES SHOULD BE MADE TO THE STATE SNOW REPORTS FOR UTAH AND ARIZONA (see inside cover).

STREAMFLOW FORECASTS

APRIL-SEPTEMBER INCLUSIVE March 1, 1958

"The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature during the forecast period will be near average. Appreciable deviations from normal of temperature and/or precipitation during the forecast period will correspondingly modify these forecasts."

BASIN AND STREAM	Forecast 1000 AF		15-Yr. Avg. 1938-52	BASIN AND STREAM Forecast %A 1000 AF 193	15-Yr. vg. Avg. 38-52 1938-52
NORTH PLATTE				COLORADO	
Sweetwater at Alcova			86	Gunnison at Gr. Junction 1850 12	3 1510
North Platte at Saratoga	700	107	657		6 703
Medicine Bow near Hanna			111		3 215
Laramie at Jelm	105	100	105	Los Pinos nr Bayfield (7) 225	9 228
				Florida nr Durango 80 11	.6 69
SOUTH PLATTE				Animas at Durango 625 12	0 522
Cache La Poudre at Canon (1)200	91	220	La Plata at Hesperus 38 12	7 30
Big Thompson at Drake	80	72	111	Dolores at Dolores 375 11	.9 314
Saint Vrain at Lyons	700	80	88	Colorado nr Grand	
Boulder at Orodell	45	82	55	Canyon, Arizona 11000 10	9 10,069
Clear Creek at Golden (2)	130	92	141		
•				GREEN RIVER	
ARKANSAS					1302
Arkansas at Salida (3)	350	108	323	Little Snake at Lily 375	365
Arkansas at Pueblo (3)	400	100	401	Elk at Clark 225 10	5 214
Cucharas at La Veta	13	81	16	Yampa at Steamboat Spgs. 325	6 281
Purgatoire at Trinidad	35	61	57	White at Meeker 400 11	9 336
COLORADO				RIO GRANDE	
Colorado nr Granby (4)	200	100	199		1 132
Willow nr Granby	45	105	43	Rio Grande at Del Norte (8) 575 10	2 565
Blue abv Green Mt. Res.	325	106	307		0 78
Colorado at Glenwood Spgs.	(5) 1400	91	1540		6 220
Roaring Fork at Glenwood (103	777	Culebra at San Luis (9) 30 10	00 30
Plateau Creek at Collbran	80	129	62		7 265
Uncompangre at Colona	200	118	170		8 34
Surface Cr. nr Cedaredge	23	128	18		4 851
					6 19
					7 62

- Observed flow minus diversions from Michigan, Colorado and Laramie Rivers, plus diversions for irrigation and municipal use.
- (2) Observed flow minus diversions through Jones Pass Tunnel.
- (3) Observed flow plus change in storage in Clear Creek, Twin Lakes and Sugar Loaf Reservoir's minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.
- (4) Observed flow plus diversions by Adams tunnel and Grand River ditch plus change in storage in Granby Reservoir.
- (5) Observed flow plus the changes as indicated in (4) plus Moffat Ditch.

- (6) Observed flow plus diversion through Twin Lakes tunnel.
- (7) Observed flow plus changes in Vallecito Reservoir.
- (8) Observed flow plus change in storage in Santa Maria, Rio Grande, and Continental Reservoir.
- (9) Observed flow plus changes in storage in Sanchez Reservoir.
- (10) Observed flow plus changes in storage in Santa Maria, Rio Grande, Continental, Terrace, Sanchez, Platoro and El Vada Reservoirs.

STATUS OF RESERVOIR STORAGE March 1, 1958

	USABLE		BLE STO	ORAGE . March 1	USABLE STORAGE USABLE 1000 A.F. March
RESERVOIR .	CAPACITY			5-yr. Avg.	RESERVOIR CAPACITY 15-yr. Avg
TUBBERT OTH	1000 A.F.	1958		1938-52	1000 A.F. 1958 1957 1938-52
	1000 1211				
			•		
NOR'I	TH PLATTE	DRAINA	GE		ARKANSAS DRAINAGE
					Twin Lakes 54.4 38.7 8.4 25.0
Kingsley	1900.0	997.7	614.4	1125.6*	Sugar Loaf 17.4 15.3 5.1 7.9
Sutherland	70.0	49.0	32.0	49.4	Clear Creek 11.4 9.4 5.4 5.1
Minatare	58.8	33.5	6.9	22.8	Meredith 41.9 28.1 0 17.5
Alcova	166.0	188. 1	171.6	81.9	Horse Creek 26.9 22.7 0 9.2
Seminoe	970.0	601.6	297.4	351.6*	Adobe Creek 61.6 58.5 0 26.0
Guernsey	44.3	29.1	44.5	36.1	Cucharas 40.0 17.7 0.6 5.9
Pathfinder	1040.5	700.0	249.2	396.8	John Martin 655.0 270.8 2.8 69.4*
Kortes	4.7	4.5	4.6	*	Great Plains 150.0 45.0 0 51.6
					Model 15.0 6.6 0.9 3.7
SOU	TH PLATTI	E DRAIN	AGE		Conchas (NM) 600.0 155.6 275.7*
		14.0	2.5	9.5	WCAustin 151.0 9.5 9
Windsor	18.6		4.8	6, 4	
Cache la Poudre	9.5	8.3		6.7	COLORADO DRAINAGE
Fossil Creek	11.6	7.1	2.7	4.2	Taylor Park 106.2 84.6 37.7 61.7
Terry Lake	8. 2	5.8	4.1		Vallecito 126.3 63.6 43.2 40.1
Halligan	6.4	6.0	3.0		Groundhog 21.7 15.3 3.5 9.0
Chambers Lake	8.8	2.2			Granby 467.5 309.3 56.6
Cobb Lake	34.3	18.9	0.0		Green Mountain 146.3 91.7 56.3 68.1
Black Hollow	8.0	3.7	2.9 62.6		Lake Mead 27,207.0 19,712.0 11231.0 19438.0
Carter	112.4	90.3	73.2		Lake Havasu 688.0 582.2 605.0 554.6
Horsetooth	143.5	103.3	8.3		Lake Mohave 1,810.3 1,743.1 1645.3 1045.2
Lake Loveland	14.3'	8.7 42.2	5.4		
Boyd Lake	44.0	7.3	2.0		RIO GRANDE (COLO) DRAINAGE
Lone Tree	9.2	5.0	3, 8		Rio Grande 45.8 41.6 4.7 15.0
Mariano	5.4	40.0	2.3		Santa Maria 45.0 11.9 2.9 10.1
Union		92.5	23.7		Sanchez 103.2 32.1 5.2 12.5
Eleven Mile	81. 9	79.1	23. 1		Terrace 17.7 1.4 1.1 3.3 Continental 26.7 12.0 2.7 7.2
Cheesman	79.0	14.7	15.5		Continental
Marston	18.9	17.8	0	13.8	Platoro 60.0 1.0
Antero	33. 0 43. 1	17.0	10.2		A DE ANAGE
Gross		25.0	10.5		RIO GRANDE (N. M.) DRAINAGE
Barr Lake	32, 2 24, 4	16.0		10.5	Hiephant Butte 2,210.
Milton	18.5	15.9	6.	1 10.8	Caballo
Standley Marshall	10.3	6,8			Isi vado
Horse Creek	20.6	12.7			Mamogordo 120.0 100.0
Riverside	57.5	55.0		4 43.2	Welvillan-Avaion 51.5
Empire	37.7	30.8			Red Bluff(Tex) 307.0
Jackson Lake	35.4	30.0		6 31.1	SALT AND GILA DRAINAGE
Prewitt	32.8	28. 1		0 21.0	
Point of Rocks	70. 0	64.6		8 51.4	Roosevent 1, 502.0
Julesburg	28. 2	19.8		8 20.3	Horse Mesa 240.1 200.2
Julesburg	20.2				Mornion Flat
					Saguaro 70.0 63.6 60.0 19.2 Bartlett 180.0 139.4 154.8 48.7
*Shorter Period	s				Horseshoe 143.0 12.8 55.3 15.5
Dilot tel 1 et 100					Carl Pleasant 163.8 12.6 24.4 21.1
					San Carlos 1,205.0 63.6 10.2 167.1
					Jun Garros 1, 500, 5

VALLEY PRECIPITATION 1/

Division Averages and Departures 3/ March 1, 1958

		Fall	Winter			Fall			inter
DRAINAGE	Sept.	-OctNov.	Dec.+	Jan.	DRAINAGE	Sept.	-OctNov.	Dec.+	Jan. 2/
DIVISIONS	Avg.		Avg.		DIVISIONS	Avg.	Dept.	Avg.	Dept.
North Platte River, Wyo.	2,95	+. 13	. 72	80	Colorado River, Ariz.	3.92	÷.63		
South Platte River	3, 20	+. 13	. 46	69	Gila River, Arizona	2.35	50	. 69	-1.19
Arkansas River	4.24	+1.33	. 86	34	Canadian River, N.M.	6.90	+3.36	. 48	62
Colorado River	5. 22	+1.11	2.17	86	Rio Grande, Colo.	3.51	+1 03	. 50	55
Green River, Wyo.	2.48	-, 06	. 67	44	Rio Grande, (N), N. M.	5.77	+2.09	1.43	72
San Juan River, N.M.	3.59	+. 74	1.20	59	Rio Grande (S), N. M.	3.06	+.64	. 65	33
	••••			• • •	Pecos River, N.M.	7.14	+3.56	.51	75
Preliminary analysis by furnished by Meteorolog Bureau				$\frac{2}{}$ Departure from average $\frac{3}{}$ Selected Stations	rage		•		

SOIL MOISTURE MEASUREMENTS *

DRAINAGE BASIN	Root	Zone So	il Moistu	re Content	DRAINAGE BASIN	Root	Zone So	il Moist	ure Conten
AND	Cap	1958	1957	1956	AND	Cap	1958	1957	1056
STATION	In.	In.	In.	In.	STATION	In.	In.	In.	1956 In.
NORTH PLATTE					UPPER COLORADO				
Columbine Lodge	8.0	4.5	0.0	0.3	Vail Pass	8.0	5.4	0.3	1.0
Willow Creek	7.0	6.8	2.2	3. 1	Ranch Creek	7.0	5.8	1.7	
Windy Point (Wyo.)					Hairpin	8.0	6.4	0.0	
Barrett (Wyo.)					Vasquez	7.0	5.9	1.4	
, , ,					Gore Pass	7.0	1.9	0.7	
SOUTH PLATTE					Blue River	7.0	6.8	0.3	
Red Feather	6.0	1.6	0.5	0.7 .					
Chambers Lake	7.0	3.3	2.2	1.9	GUNNISON				
Deer Ridge	6.0	1.0	0.7	0.8	Monarch Pass	8.0	7.3	3.8	
Hidden Valley	8, 0	5.3	1.7	3.2					
Longs Peak	7.0	0.8	0.6	1.4	RIO GRANDE (Colo.)				
University Camp	7.0	1.3	0.8	0.9	Bristol View	7.0	6.9	0.6	0.3
Berthoud Falls	6.0	3.1	0.4	1.4	Wolf Creek Pass	9.0	6.0	0.7	3. 8
Alma	7.0	4.4	0.7		River Springs	7. 0	1.9	2.5	0.5
Kenosha Pass	7.0	6.3	0.9		La Veta Pass	8.0	2.4	3.0	
ARKANSAS					RIO GRANDE (N. M.)(1)				
Leadville	7.0	2.7	1. 3	1.4	Red River	7.0	3.8	0.5	2.0
Lake Creek	6.0	5.1	2.3	1. 4	Tres Ritos	7.0	6.3	2.1	2.4
Garfield	7. 0	6.4	3.4		Bateman	8.0	7. 7	2.4	2, T
		0,4	5.4		Chamita	8.0	5.6	0.8	
ROARING FORK					- Circumsta	3.0	5.0	0.0	
Placita	8. 0	4.7	1.2	0.9					
Maroon	8. 0	3.7	0.4	1.5					
	0. 0	J. 1	0.4	1. 0					

^{*}Measurements made about November 1. Maximum record five years. Interpretation methods are tentative so figures are subject to change in later years.
(1) New Mexico Stations for March 1.

SNOW COURSE MEASUREMENTS

March 1, 1958

SNOW COURSE		40.00		er Con		Years	anow: ======		Depth		r Cont		Years
	Date	1958 Inches		Inches		of Record	SNOW COURSE	Date	1958 Inches		Inches		of Record
	Bare	Inches	1930	1001	Avg.	**		Date	Inches	1000	1001		**
PLA	TTE F	RIVER D	RAIN	AGE			, P	LATTI	E RIVER	DRAII	NAGE		
SWEETWATER RIVER	3						CLEAR CREEK						
Grannier Meadows(w)				10.7	11.5	21	Loveland Pass	2/25	42	12.1	13.9	11.8	
South Pass* (w)					11.8	18	Grizzly Peak*	2/25	51	13.7	15.5	15.2	
Larsen Creek (w)	2/28	37	8.4			9	Empire	2/26	22	4.5	7.4		. 9
	·						Berthoud Falls	2/26	40	11.1	12.9		7
NO. PLATTE RIVER							Clear Creek	2/26	47	12.9	13.1		6
Cameron Pass	Est	70		19.0		21							
Park View	2/27	20	5.2	9.3	7.7	22	SOUTH PLATTE F		4.0	11 7	11.9	9.3	21
Columbine Lodge	2/28	76			18.4	22 20	Hoosier Pass	2/28	42 35	11.7	9.0	6.9	
Willow Cr. Pass* Northgate	$\frac{2}{27}$ $\frac{2}{28}$	34 22	4.3	13. 2 7. 3	10.4	8	Jefferson Cr. Geneva Park	$\frac{2}{28}$ $\frac{2}{27}$	9	1.8	34.0		8
Bottle Creek (w)	2/26	35		16. 2		20	Geneva Park	2/21	J	1.0	04.0		Ü
Webber Spring (w)	2/26	44	12.6	19.5	14.9	20	ΔB	KANSA	S RIVE	R DRAI	NAGE		
Old Battle (w)	2/26	79		33.2		21	1111			214.1.	211102		
N. French Creek(w)	2/27	94		27.9	23.2	20	ARKANSAS RIVER						
N. Barrett Creek(w)	2/27	82		17.8		21	Tennessee Pass	2/27	36	8.0	10.1	7.5	22
Ryan Park (w)	2/28	53		11.7	8.8	21	Twin Lakes T.	2/28	48	12.1	12.1	8.9	20
Spring Creek(w)		dropp				8	La Veta Pass*	2/28	18	6.1	13.9	8.3	3 20
Albany (w)	2/24	40		13.5		9	4 Mile Park	2/26	20	4.5	6.2	3.5	19
LaBonte (w)	2/26	16	3.4	4.9		9	Fremont Pass	2/25	49	13.3	14.3	12.9	22
Boxelder(w)	3/3	21	4.0	5.2		8	Blue Lakes		NS	NS	NS		
							Monarch Pass	2/28	56	14.7	21.2	14.5	
LARAMIE RIVER							Saint Elmo (a)	3/1	30	8.2	13.5		8
Roach	Est.	56	-	16.8		17	Timberline	3/2	61	14.1	23.0		7
Deadman Hill* (a)	3/3	50		12.0		21	East Fork	2/26	34	5.4	9.7		5
McIntyre	3/1	30		12.4		9	Westcliffe	2/27	21	4.6	9.6		5
Brooklyn Lake (w)	2/24	61		23.4		21	Bourbon	2/28	20	6.2	8.8		1
Fox Park (w)	2/28	29	7.0	7.4	5.5	21			no n	.n. nn /	****		
Pole Mtn. * (w)	2/25	11	2.1	6.0	4.2	22 20	CC	LORA	DO RIVE	ER DRA	INA GE	•	
Libby Lodge (w)	2/24	31 33		10. 2 11. 5	8.3 9.2	20	COLODADO DIVED	(Abarr	o Clanus	and Cam	in acl		
Hairpin Turn (w) Albany (w)	$\frac{2}{24}$	40		13.5	-	9	COLORADO RIVER Cameron Pass*	Est	70	18.0	19.0	18.5	5 21
ibally (w)	2,21	10	11.0	10.0	14. 1	J	Phantom Valley	2/26	30	7.4	8.5	8.9	
POUDRE RIVER							Hoosier Pass*	2/28	42	11.7	11.9	9.3	
Cameron Pass	Est.	70	18.0	19.0	18.5	21	Berthoud Pass	3/1	48	12.6	14.5	12.0	
Chambers Lake	3/2	30	8.1	8.5	7.2	21	Tennessee Pass	2/27	48	12.1	. 10.1	7.5	5 22
Big South	3/2	16	3.9	2.1	2.1	20	M. Fork Camp Gr.	Est.	32	6.4	10.1	8.2	2 22
Deadman Hill	3/3	50	12.5	12.0	11.4	21	Fiddler Gulch	Est.	47	14.2	15.0	12.9	
Lake Irene*	2/26	65	18.8	17.8	17.8	20	Lulu	3/2	60	17.0	15.7	14.2	
Hour Glass Lake	2/27	19	4.0	6.0	6.0	18	Willow Creek P.	2/27	34	8.8	13.2	10.4	
Red Feather	3/4	17	2.8	8.3		8	N. Inlet Grand L.	2/27	27	5.2	9.4	7.8	
Lost Lake	3/2	36	9.8	13.6		6	Lake Irene	2/26	65	18.8	17.8	17.8	
NG THOMPSON DWG							Arrow	2/28	35	8.1	12.0 12.7	8.5 9.9	
BIG THOMPSON RIVER		0.5	10 0	157 0	177 0	9.0	Lapland	3/4	34	8.6	14.3	12.9	
Lake Irene* Hidden Valley	2/26	65 26	5.5	17.8		20 17	Fremont Pass	$\frac{2}{25}$ $\frac{2}{27}$	49 43	13.3 9.8	13.2	10.5	
Deer Ridge	$\frac{2}{27}$	8	1, 8	8. 1 5. 6	9.4	9	Lynx Pass Shrine Pass	2/25	54	15. 1	16.4	13.9	
ongs Peak	3/1	26		11.5		7	Grizzly Peak	2/25	51	13.7	15.5	15.2	
Wo-Mile	2/27	39		11. 1		6	Glen-Mar Ranch	2/28	28	5.3	9.0	8.2	
	-,	00	0.0				Monarch Lake	3/1	32	6.1	12.0		10
T. VRAIN RIVER							Granby	2/27	22	5.6	8.0		9
Vild Basin	2/28	30	8.0	12.2	11.1	21	Grand Lake	2/28	27	4.8	8.4		9
Copeland Lake	2/28	9	2.7	5.1	5.1	9	Berthoud Summit	2/27	57	15.8	16.7		7
Vard	2/28	11	3.2	6.4		8	Frazer View	2/27	37	9.2	11.2		7
							Gore Pass	2/27	32	8.2	11.8		7
OULDER CREEK							Frisco	2/26	28	6.9	9.0		7
niversity Camp	2/27	49		18.1		21	Snake River	2/26	27	7.1	8.5		7
Moffat	2/28	33	10.4	9.6	~	8	Summit Ranch	Est	29	8.5	NS		 5
Boulder Falls	2/27	30	7.2	9.0		8	Vail Pass	2/25	53	15.9	18.6		5 5
							Pando	2/26	32	7.9 9.7	10.5 12.1		5 5
•							Kokomo Milner	2/26	41 43	12.5	10.0		6
On adjacent duality						1		2/26			10.0		
On adjacent drainage		loce the	n 15 -	ADMC .	of noor	ord 1	Blue River	7.178	37	9 2	8.8		1
* Averages for course	s with					ord	Blue River	$\frac{2}{28}$	37 45	$9.2 \\ 11.2$	8.8		1 1
* Averages for course during the period 19	s with					ord	Jones Pass	2/27	37 45 27	9.2 11.2 5.4	8.8 13.4 10.5		
* Averages for course	s with					ord		* ·	45	11.2	13.4		1

SNOW COURSE MEASUREMENTS

March 1, 1958

SNOW COURSE]	Depth		er Conte	,,,,	Years of	SNOW COURSE		Depth		er Cont Inches	ent	Years
SNOW COURSE	Date	1958 Inches		n Inches		Record	SNOW COURSE	Date	1958 Inches		1957	Avg.	Recor
90						**	600						**
CC	LORAD	O RIV	ER DRI	AINAGE			CO	LORA	DO RIV.	ER DR	AINAGE	•	
ROARING FORK	0/00						DOLORES RIVER	0/00	20			7 0	1.0
Ind. Pass Tunnel	2/28 Est.	56 38	15.2	20.5	13.8	22 22	Rico Telluride	$\frac{2}{28}$	39 41	7.9 8.5	11. 1 7. 0	7.0 7.3	
North Lost Trail Nast	Est.	23	12.0 5.8	18. 1 9. 0	11.1	13	Lizard Head	2/28	70	14.5	15.0	12.8	
Ivanhoe	3/1	52	13.0	18.8		8	Trout Lake	2/28	67	12.5	12.5	11.7	
Lift	2/28	56	13.3	21.8		2	, arout Educo	-,					
							SAN RAFAEL RIVE						
YAMPA RIVER	0.40						Hntngtn-Horseshoe		76	26.7	20.5	21.8	
Dry Lake (a)	3/3	79	22.0	23.2	16.3	19	Seeley Creek R.S.	2/27	60	17.2	12.2	13.8	6
Columbine Lodge* Elk River	$\frac{2}{28}$ $\frac{2}{26}$	73 48	21.8 13.4	23.9 19.7	18.4 14.7	22 19	VIRGIN RIVER						
Lynx Pass*	2/27	43	9.8	13. 2	10.5	22	Long Valley Jnct.	2/25	7	0.9	0.0	4.2	9
Routt Line	-,	NS	NS	32.1		7	Harris Flat R.S.	2/25	27	7.3	7.6	9.6	
Rabbit Ears		NS	NS	31.3		7	Duck Creek R.S.	2/25	44	12.0	14.6	13.8	
Yampa View	2/28	56	12.4	16.7		7	Cedar Breaks	2/25	64	20.8	14.2	18.7	
•	Dropped			NS			Webster Flats	2/25	54	14.0	14.0	14.1	8
Bear River	3/3	NS 42	NS	NS		2 2	COLODADO D 10 E		ÄTTS				
Clark (a) Old Battle	$\frac{3}{3}$	4 2 79	11.7 26.6	15.3 33.2	25.5	21	COLORADO R. (S. E LaSal Mt.	3/3	41	10.6	9.9	10.1	6
Old Battle	2/20	10	20.0	00.2	20.0	21	Buckboard Flat	3/4	42	12.9	12.5		2
WHITE RIVER							Duckboar a rat	0, 1	15	12.0	12.0		
Burro Mountain	Est.	58	19.3	18.0	14.9	22	PRICE RIVER						
Rio Blanco	3/1	44	14.3	20.3	12.8	19	Indian Canyon*	2/27	33	8.0	8.4	8.9	
							Gooseberry Res.	2/24	51	16.4	17.0	18.6	
PLATEAU CREEK	2/1	70	00 1	17 0	10 0	0.1	Staley Ranch	3/1	29	7.8	8.8	7.0	
Mesa Lakes Trickle Divide	3/1 Est.	72 77	22. 1 29. 5	17.2 25.9	12.9 22.4	21 18	Dry Valley Divide Hntngtn-Horseshoe	3/1 $2/24$	37 76	11. 1 26. 7	9.8 20.5	9. 8 21.8	
I Fickle Divide	DSt.	''	20.0	20.0	22.4	10	Mud Creek	3/1	48	12.8	15.8	16.9	
GUNNISON RIVER							mud Oroca	0/1	10	10.0	10.0		
Crested Butte	2/27	41	9.3	19.3	12.0	22	DUCHESNE RIVER	•					
Park Cone	2/28	34	7.3	14.4	8.4	21	Lake Fork Mt.				8.2	10.4	
Alexander Lake	Est.	67	23.6	19.2	17.9	21	Paradise Park	2/26	39	9.2	8.3	11.6	
Ironton Park	E7 - 4	NS 77	NS 29.5	13.5 25.9	11.1	21	Mosby Mt. (L)	2/26	35 NG	7.9	6.9 NS	9.9	8
Trickle Divide Park Reservoir	Est. Est.	74	28.0	23. 2	22.4	18 18	Brown Duck Lake Indian Canyon	2/27	NS . 33	NS 8.0	8.4	8.9	
Porphyry Creek	2/28	54	14.8	20.0	13.5	17	Indian Canyon	2/21	, 55	0.0	0. 1	0.0	20
Kannah Cr.	-,	NS	NS	NS			UPPER GREEN RIV	ER (U	TAH)				
Lake City	3/1	42	13.0	13.3	-,-	9	Hewinta R.S.	•	NS	NS	NS		
Spring Cr. Pass*	3/1	44	11.8	9.0		7	Hole-in-Rock		NS	NS	NS		
Cochetopa Pass*	2/28	20	5.1	5.6		9 8	King's Cabin (U)	2/27	27	6.3	7.4	10.4	
McClure Pass Red Mt. Pass	Est. 3/3	48 104	15.5 34.2	21.0 25.2		6	King's Cabin (L)	2/27	24	6.0	6.6	9.1	9
Blue Mesa	3/3	NS	NS	NS									
							GREEN RIVER (WY			T C	0.0		c
CAN IIIAN DHID							Dutch Joe (w)	3/4 3/3	30 33	7.6 8.1	8.3 9.7	9.5	6 1 7
SAN JUAN RIVER Wolf Creek Pass*						•	Mulligan Park(w) Kendall R.S. (w)	3/3	33	0. 1	8.0	10.6	
Upper San Juan	2.28	68	20.6	36.4	24.3	21	Loomis Park (w)				15.8	15.6	
Granite Peaks	$\frac{2}{28}$ $\frac{2}{27}$	83 17	27.3 4.8	37.7 9.6	27. 0 7. 4	20 17	Snyder Basin R. S.(v	v)			13.8		2
La Plata	2/21	NS	NS	NS			Piney-LaBarge (w)				16.0		3
Wolf Creek Summit	2/28	73	23.6	33. 1		7							
Chama Divide*	2/28	14	4.2	4.3	5.2	18	GILA RIVER	2/20		2.4	0.0	2 0	20
Chamita*	2/28	31	7.4	13.7	10.0	17	Frisco Divide State Line	$\frac{2}{28}$	6 4	2,4 1.4	0.0 0.0	2.0 2.8	
ANIMAS RIVER							Taylor Creek	2/28	1	0.5	0.0	0.4	
METAIN OUNDER							Inman	2/27	1	0.5	0.0	0.5	
Ironton Park*		NS	NS	13.5	11.1	21	Nutrioso	2/27	5	0.7	0.0	2.2	
Cascade	3/3	43	10.5	16.5	10.9	19	Beaver Head	2/28	6	1.6	0.0	3.4	
Spud Mt.	3/3	82	27.4	30.7		7	Coronado Trail	3/1	8	1.0	0.0	3.5	
Molas Lake	3/3	53	15.3	19.4		7	Rose Canyon	3/1			0.0	0.7	
Howardville	3/3	55	13.8	12.5		7	Bear Wallow	2/28			0.0	2.6	10
Mineral Creek Red Mt. Pass*	3/3	62	17.8	15.6		7							
100 anti, 2 ass.	3/3	104	34.2	25.2		7							
* On adjacent dra	inara						NS No Survey						

^{*} On adjacent drainage

^{**} Averages for courses with less than 15 years of record during the period 1938-52 are partially estimated.

NS No Survey
(a) Air observed

⁽w) Wyoming

SNOW COURSE MEASUREMENTS

March 1, 1958

SNOW COURSE	Depth 1958	Wa	ater Cont in Inches		Years	SNOW COURSE		Depth 1958		er Cont	ent	Years
Dat	_	1958		Avg.	Record	BNOW COOLISE	Date	Inches			Avg	Recor
COLO	RADO RI	VER D	RAINAG	E	**	F		ANDE I				26.36
SALT RIVER						RIO GRANDE IN C	OT.OR	۵۵۵				
Forest Dale	0	0.0	0.0	1.2	19	Pyramid	02011	NS	NS	8.4		7
McNary	T	Т	0.0	2.8	19	Spring Creek (a)	3/1	44	11.8	9.0		7
Nutrioso	5	0.7	0.0	2.2	20	Pool Table	3/1	28	5.3	6.0		9
Coronado Trail	8	1. 0	0.0	3.5	20	L. Humphreys	3/1	28	6.6	7.8		9
Milk Ranch	T	T	0.0	0.8	17	Cochetopa	2/28	20	5.1	5.6	=_	9
Workman Creek	NS	NS.	0.0	1.5	6	Red Mt. Pass	3/3	104	34.2	25.2		7
Maverick Fork	36	9.6	7.4	7.8	7	Porcupine	3/1	44	10. 1	11.0		7
Baldy	30	7.7	3,6	5.9	8	Wolf Creek Summit		73	23.6	33. 1		7
Fort Apache	29	6.8	5.0	6.2	8	Hiway	2/28	62	20.9	32.8		1
Pacheta	9	2.0	0.0	2.5	7	Pass Creek	2/28	34	6.9	17.3		1
						ALAMOSA RIVER						
ERDE RIVER						Silver Lakes	2/27	24	5.8	9.1	5.9	21
ron Springs*	0	0.0	0.0	1.2	12	Summitville	2/28	53	13.4	22.0	16.2	17
Camp Wood	0	0.0	0.0	0.8	12							
lingus Mountain	T	T	0.0	1.1	11	CONEJOS RIVER						
Iormon Lake*	5	0.8	T	4.9	11	River Springs	2/27	18	3.6	11.1	7.2	2 21
'ort Valley*	1	0.3	0.0	2.3	11	Cumbres Pass (a)	2/27	52	15.6	20.1	19.5	5 21
halendar*	T	T	0.0	2.8	11	Platoro	2/27	46	10.3	21.0		8
lunds Park	T	T	0.0	1.0	7.	West Conejos	2/27	27	5.6	14.3	9.6	9
asner Park	T	T	T	2.6	7	La Manga (a)	2/27	55	16.0	24.7	20.5	5 9
Iormon Mt.	6	1.6	3.7	4.6	8							
lappy Jack	0 0.0 0.0 3.7 5 SANGRE DE CRISTO RANGE (COLORADO) LaVeta Pass 2/28 18 6.1 13.9								8.3	3 20		
ITTLE COLORADO	RIVER					Culebra	2/28 3/3	18 36	6. 1 9. 6	13.9 9.5	8.8	
orest Dale*	0	0.0	0.0	1.2	19	0 0 0 0 0 0	3/3	30	0.0	0.0	0. (, 10
IcNary	T	T. 0	0.0	2.8	19	CHAMA RIVER						
utrioso*	5	0.7	0.0	2.0	20	Cumbres Pass (a)	2/27	52	15.6	20.1	19.5	5 21
Iormon Lake	5	0.8	T. T	4.9	11	Payrole (a)	2/27	48	11.5	9.5	9.2	
ort Valley	1	0.3	0.0	2.3	11	Chama Divide	2/28	14	4.2	4.3	5.2	
Iormon Mt.	6	1.6	3. 7	4.6	8	Chamita	2/28	31	7.4	13.7	10.0	
appy Jack	0	0.0	0.0	3.7	5	Bateman	2/27	49	11.1	11.7		8
entry	4	0.8	0.0	1.4	- 6		2/21	10				
eber	3	0.7	T	2. 1	7	PECOS RIVER						
anyon Creek	3	0.6				Panchuela	3/1	16	2.9	0.0	3.5	21
J		0.0				Big Tesuque	2/26	23	6.2		5.6	
ILLIAMS RIVER						Rio En Medio*	2/26	34	10.1	7.6		8
on Springs	0	0.0	0.0	1, 2	12		-,					
amp Wood*	0	0.0	0.0	0.8	12	RIO GRANDE IN NE	W ME	XICO				
illow Ranch	NS	NS		0.2	8	Red River	2/27	23	6.2	9.7	7.8	20
						Taos Canyon	3/1	15	4.5	6.3	6.0	20
OWER COLORADO F	RIVER					Aspen Grove	2/28	18	4.5	4.3	4.6	21
right Angel	32	6.7	13.4	9.4	11	Hematite Park*	3/1	21	6.0	3.2	5.1	. 20
rand Canyon	2	0.5	0.0	2.0	11	Tres Ritos	3/3	20	5.0	4.8	6.0	20
ort Valley	1	0.3	0.0	2.3	11	Payrole (a)	2/27	48	11.5	9.5	9.2	17
halender	T	T	0.0	2.8	11	Cordova (a)	2/27	23	14.5	11.8	9.9	16
						Big Tesuque	2/26	23	6.2	2.7	5.6	16
RIO (GRANDE	DRAIN	AGE			Elk Cabin	2/28	14	4.0		3.1	10
						Rio En Medio	2/26	34	10.1	7.6		8
IO GRANDE IN COLO	DRADO					Quemazon	2/27	42	11.1	7.1		8
olf Creek Pass 2/2		20.6	36.4	24.3	21	Fenton Hill	2/28	23	6.2	2.2		5
pper Rio Grande 2/2	6 35	11.9	6.4	6.9	20							
anta Maria			8.4	5. ዓ	21	CANADIAN RIVER						
						Hematite Park	3/1	21	6.0	3.2	5.1	20
						Tres Ritos	3/3	20	5.0	4.8	6.0	20
On adjacent drainag						Cordova (a)	2/27	56	14.5	11.8	9.9	16
* Averages for cours	ses with	less tha	ın 15 vea	rs of re	ecord							
during the period 1												

NS No Survey
(a) Air observed

Federal - State - Private COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"